

**THE IMPACT OF ENTREPRENEURIAL  
ORIENTATION AND MARKET ORIENTATION  
ON MANUFACTURING SMALL AND MEDIUM  
ENTERPRISES SATISFACTION WITH THE  
MODERATING EFFECT OF E-COMMERCE  
UTILIZATION IN MALAYSIA**

**ABDULKARIM KANAAN JEBNA**

**UNIVERSITI SAINS MALAYSIA**

**2016**

**THE IMPACT OF ENTREPRENEURIAL  
ORIENTATION AND MARKET ORIENTATION  
ON MANUFACTURING SMALL AND MEDIUM  
ENTERPRISES SATISFACTION WITH THE  
MODERATING EFFECT OF E-COMMERCE  
UTILIZATION IN MALAYSIA**

by

**ABDULKARIM KANAAN JEBNA**

**Thesis submitted in fulfilment of the  
requirements for the degree of  
Doctor of Philosophy**

**September 2016**

## ACKNOWLEDGMENT

Primarily, I would like to especially thank my parents for all their support, encouragement, and hope to graduate and proceed with my life. Also, thanks to my brothers for their wishes.

In addition, I would like to thank my supervisor, Dr. Ahmad Suhaimi Baharudin, for his patience, help, support, and guidance throughout this PhD journey. Thank you doctor.

Besides, I would like to thank Professor Noor Hazlina Ahmad for all help she has provided me. In addition, I want to thank Professor T. Ramayah for his help for data analysis. Also, many thanks to Professor Krishnaswamy Jeyaraman for his help and generosity offer for advices and guidance at any time.

Besides, I want to thank Dato' Hafsah Hashim (Chief Executive Officer of Small and Medium Enterprise: SME Corporation Malaysia) as she helped me to get SME list. Also, thanks to all SME Corporation members especially in Perak, Nigari Sembilan, Penang, and Kuala Trengganu.

Moreover, I want to thank Professor Dr. Joe F. Hair. He offered me useful replies and discussion that helped me in my research. Besides, special thanks to Dr. Mathew Hughes (Durham University) for his precious and valuable help.

More thanks to Professor Bill Wales (James Madison University), Professor Tom Lumpkin, and Dr. Erik Monsen (University of Vermont) for all comments given.

Besides, thanks to all friends who wish me successful life and graduation.

## **TABLE OF CONTENTS**

<b>ACKNOWLEDGMENT</b>	<b>ii</b>
<b>LIST OF TABLES</b>	<b>viii</b>
<b>LIST OF FIGURES</b>	<b>x</b>
<b>LIST OF APPENDICES</b>	<b>xii</b>
<b>LIST OF ABBREVIATIONS</b>	<b>xiii</b>
<b>ABSTRAK</b>	<b>xiv</b>
<b>ABSTRACT</b>	<b>xvi</b>
<b>CHAPTER 1 INTRODUCTION</b>	<b>1</b>
1.1 Introduction	1
1.2 Overview	2
1.2.1 Small and Medium Enterprises (SMEs)	2
1.2.2 Electronic Commerce (E-Commerce)	9
1.3 Background of the Study	12
1.4 Research Problem	16
1.4.1 Lack of Survival and Competitiveness	16
1.4.2 Lack of E-Commerce Utilization	18
1.5 Research Objectives	19
1.6 Research Questions	19
1.7 Significance of the Study	20
1.8 Scope of the Study	23
1.9 Definition of Variables	24
1.9.1 SME Satisfaction	24
1.9.2 Entrepreneurial Orientation (EO)	25
1.9.2(a) Risk Taking	25
1.9.2(b) Innovativeness	25
1.9.2(c) Pro-activeness	25

1.9.3 Market Orientation	26
1.9.3(a) Customer Orientation	26
1.9.3(b) Competitor Orientation	26
1.9.3(c) Inter-functional Coordination	26
1.9.4 E-Commerce Utilization	26
1.10 Organization of this Thesis	27
 <b>CHAPTER 2 LITERATURE REVIEW</b>	 <b>29</b>
2.1 Introduction	29
2.2 SME Satisfaction	29
2.3 Entrepreneurial Orientation (EO)	33
2.4 Market Orientation (MO)	36
2.5 Electronic Commerce (E-Commerce)	40
2.5.1 E-Commerce Models	45
2.5.2 E-Commerce in Malaysia	46
2.5.3 E-Commerce Utilization (Adoption) Dimensions	50
2.5.4 E-Commerce Dimensions	53
2.5.4(a) Communications	54
2.5.4(b) Order Taking	55
2.6 Resource-Based View (RBV)	55
2.6.1 The Underlying Core of RBV	57
2.7 Dynamic Capabilities (DC)	63
2.8 The Underlying Theory of This Research	65
2.9 Control Variables	67
2.9.1 Enterprise Demographic Factors	67
2.9.1(a) Firm Age	68
2.9.1(b) Firm Size	68
2.9.1(c) Industry Category	69
2.9.1(d) Firm Affiliation	70
2.10 Critical Review of Chapter 2	70
2.11 Summary	72

<b>CHAPTER 3 THEORETICAL FRAMEWORK AND HYPOTHESES</b>	<b>73</b>
3.1 Introduction	73
3.2 Theoretical Model for SME Satisfaction	73
3.3 The Relationship between Entrepreneurial Orientation (EO) and SME Performance Satisfaction	77
3.4 The Relationship between Market Orientation (MO) and SME Satisfaction	79
3.5 The Relationships between Entrepreneurial Orientation, and Market Orientation and SME Satisfaction with the Moderating Application of E-Commerce Utilization	82
3.6 Summary	88
 <b>CHAPTER 4 RESEARCH DESIGN AND METHODOLOGY</b>	 <b>89</b>
4.1 Introduction	89
4.2 Research Design	89
4.3 Population	90
4.3.1 Background of Manufacturing-Related SMEs	90
4.4 Sampling Design	96
4.5 Research Instrument	99
4.6 Unit of Analysis	100
4.7 Response Bias of the Survey Items	100
4.8 Questionnaire Design	101
4.8.1 The Content of the Questionnaire	103
4.9 Variable and Measures	103
4.9.1 Demographic Variables	104
4.9.2 Small and Medium Enterprises (SMEs)	104
4.9.3 SME Satisfaction	105
4.9.4 Entrepreneurial Orientation	106
4.9.5 Market Orientation	107
4.9.6 E-Commerce Utilization	109
4.9.7 Control Variables	111
4.9.7(a) Firm Demographic	112
4.10 Validity of Measures	112
4.11 Pilot Study	112

4.12 Primary Data Collection Procedure	114
4.13 Data Preparation	121
4.14 Independent sample t-test and effect size of mean difference	121
4.15 Common Method Variance (CMV)	122
4.16 Data Analysis Technique	123
4.17 Reflective and Formative Measurement Models	124
4.18 Selecting Partial Least Square Over Covariance-based SEM (CB-SEM)	125
4.19 Evaluation of PLS Path Model Results	128
4.19.1 Assessment of Measurement Models	128
4.19.2 Assessment of Structural Model	130
4.20 Testing Moderating Effect in PLS	131
4.21 Summary	132
<b>CHAPTER 5 RESULTS</b>	<b>134</b>
5.1 Introduction	134
5.2 Manufacturing SMEs and Respondents' Profile	134
5.3 Non Response Bias	140
5.3.1 Non Response Bias – independent sample t – test	141
5.3.2 Non Response Bias – Chi Square Test	143
5.4 Common Method Bias	145
5.5 Goodness of Measurement Model	146
5.5.1 Construct validity and reliability	146
5.5.1(a) Construct validity – Convergent validity	146
5.5.1(b) Construct validity – Discriminant validity	148
5.5.1(c) Reliability analysis	149
5.6 Test of Differences	150
5.6.1 Micro, Small, and Medium Manufacturers	150
5.6.2 Test of Differences: Years of Operations	153
5.7 Descriptive Statistics of the Latent Variables	154
5.8 Entrepreneurial Orientation and Market Orientation as Second Order Constructs	154
5.9 Control Variables	158
5.10 Assessment of Structural Model	161

5.10.1 Direct Effect	161
5.10.2 Testing Moderating Effect	165
5.10.3 Predictive Relevance ( $Q^2$ )	167
5.10.4 Summary	167
<b>CHAPTER 6 DISCUSSION AND CONCLUSION</b>	<b>170</b>
6.1 Introduction	170
6.2 Discussion of Direct Relationships between Entrepreneurial Orientation and Market Orientation and Business Satisfaction	171
6.3 Discussion of Findings on Moderation	175
6.4 Theoretical Implications	181
6.5 Practical Implications	185
6.5.1 Government & Agencies	186
6.5.2 Owner-Managers & Technopreneurs	188
6.5.3 Information Technology (IT) Developers	193
6.6 Summary of the Practical Implications	197
6.7 Limitations of the Study	199
6.8 Suggestions for Future Studies	200
6.9 Summary of the Findings	202
6.10 Conclusion	206
<b>REFERENCES</b>	<b>209</b>
<b>APPENDICES</b>	<b>243</b>



## **LIST OF TABLES**

	<b>Page</b>
Table 1.1 Definition of SMEs Adopted from SME Corp. Malaysia (2013b) and Bank Negara Malaysia (2013a)	5
Table 1.2 Labor productivity, gross domestic products (GDP) and employment values in manufacturing sector	6
Table 1.3 Key indicators of SMEs (Department of Statistics Malaysia, 2012)	7
Table 2.1 E-Commerce definitions and dimensions	50
Table 2.2 Control variables that affects business performance	67
Table 4.1 Numbers of SMEs in manufacturing sector by legal organization and size 2010 (Department of Statistics, 2012)	92
Table 4.2 Number of SMEs in manufacturing sector by years in operation 2010 (Department of Statistics, 2012)	94
Table 4.3 Summary of labor productivity and Gross Domestic Product (GDP) in SMEs manufacturing sector	95
Table 4.4 Measurements of the factors of this study	104
Table 4.5 SME satisfaction items	105
Table 4.6 Measurement of entrepreneurial orientation	106
Table 4.7 Measurement of market orientation	108
Table 4.8 Measurement of e-commerce utilization	109
Table 4.9 Post procedures used to collect data	117
Table 4.10 Email Responses	120
Table 4.11 Rules of Choosing PLS-SEM or CB-SEM	127
Table 4.12 Assessing Reflective Measurement Models	130
Table 5.1 Test of Homogeneity between Mail and E-Mail Responses	135
Table 5.2 Respondents' Background Information	138
Table 5.3 Non Response Bias for all Variables	142
Table 5.4 Result of Chi-Square Test for Non-Response Bias	143
Table 5.5 Summary of Construct Validity and Reliability	147

Table 5.6	Discriminant Validity of Construct - Fornell-Larcker Criterion	150
Table 5.7	Test of Differences about Manufacturer Type	152
Table 5.8	Test of Differences about Years of Operations	153
Table 5.9	Descriptive Analysis	155
Table 5.10	Summary of Construct Validity and Reliability with Entrepreneurial Orientation and Market Orientation as a Second Order Constructs	156
Table 5.11	Discriminant Validity	158
Table 5.12	Results of the Control Variables	160
Table 5.13	Summary of Construct Validity and Reliability with Entrepreneurial Orientation and Market Orientation After Deletion	162
Table 5.14	Summary of Path Coefficient and Hypotheses Testing for Direct Effect	163
Table 5.15	Summary of Path Coefficient and Hypotheses Testing for Direct Effect (life and work balance satisfaction of non-financial performance factor is excluded)	165
Table 5.16	Summary of Moderating Effect Results	166
Table 5.17	Summary of Predictive Relevance ( $Q^2$ )	167
Table 5.18	Summary of Hypotheses Results	168

## LIST OF FIGURES

	<b>Page</b>
Figure 1.1 Economic Contribution in 2020 (SME Corp. Malaysia, 2015c)	4
Figure 1.2 Distribution of SMEs by sector (Department of Statistics Malaysia, 2012)	8
Figure 1.3 Annual GDP 2014 across sectors (SME Corp. Malaysia, 2015a)	9
Figure 1.4 Examples of ICT involvements in our daily lives	10
Figure 1.5 Value added of e-commerce - annual percentage change (Department of Statistics Malaysia, 2015b)	13
Figure 1.6 Comparing Malaysian SMEs with International Counterparts in Productivity (SME Corp. Malaysia, 2012e)	17
Figure 2.1 Entrepreneurial orientation dimensions	35
Figure 2.2 Market orientation dimension	38
Figure 2.3 Information technology usage in percentage adopted from SMEs (SME Corp. Malaysia, 2015a)	48
Figure 2.4 E-Commerce Utilization Dimension (Voola et al., 2012; Wu et al., 2003)	54
Figure 2.5 Classification of Organizational Resources Adopted from Maier (2007)	59
Figure 2.6 Resources Characteristics to Maintain Sustainable Competitive Advantage	60
Figure 2.7 A Framework Adopted from Wade et al. (2004)	63
Figure 3.1 Conceptual framework of this research	78
Figure 4.1 SMEs in Manufacturing Sector by Size, 2010 (Department of Statistics Malaysia, 2012)	91
Figure 4.2 SMEs by legal organization and size: number of establishments in the manufacturing sector 2010 (Department of Statistics Malaysia, 2012)	93
Figure 4.3 SMEs by size in percentage in the manufacturing sector 2010 (Department of Statistics Malaysia, 2012)	93
Figure 4.4 SMEs in Manufacturing Sector by State 2010 Reprinted from (Department of Statistics Malaysia, 2012)	94

Figure 5.1	Measurement Model Framework (First Order)	151
Figure 5.2	Measurement Model Framework with EO and MO as Second Order Constructs	159
Figure 5.3	PLS Algorithm with Entrepreneurial Orientation and Market Orientation as Second Order (excluding life and work balance satisfaction indicator)	164

## LIST OF APPENDICES

	<b>Page</b>
Appendix A	Cover Letter and English-Malay Questionnaire Versions 244
Appendix B	Snippets of Source Code SME Info Fetcher Application (C#) 259
Appendix C	Post vs Email – Independent Sample T-Test 265
Appendix D	Frequency tables – E-Mail Informants’ Profile 268
Appendix E	Non-Response Bias – Independent Sample T-Test 274
Appendix F	Non-Response Bias – Email Informants - Chi-Square Test 280
Appendix G	Harman Single Factor Test 289
Appendix H	Assessment of Reflective Indicators for First Order 292
Appendix I	Assessment of Reflective Indicators After Deleting Cross Loading Validation 295
Appendix J	Assessment of Reflective Indicators (EO & MO as 2nd Order Factors) 299
Appendix K	Assessment of Reflective Indicators (EO & MO as 2nd Order Factors) After Removing NFP9 303
Appendix L	Predictive relevance 305
Appendix M	Interview Manuscript 306
Appendix N	List of Publications and Conference Participations 316

## **LIST OF ABBREVIATIONS**

SMEs	Small and Medium Enterprises
EO	Entrepreneurial Orientation
MO	Market Orientation
E-Commerce	Electronic Commerce
PR	Proactiveness
IN	Innovativeness
RT	Risk-Taking
CS	Customer Orientation
CP	Competitor Orientation
IFC	Inter-Functional Coordination
OC	Outbound Communication
IC	Inbound Communication
OT	Order-Taking
ICT	Information Communication Technology
RBV	Resource-Based View
DC	Dynamic Capabilities

**KESAN ORIENTASI KEUSAHAWANAN DAN ORIENTASI PASARAN  
TERHADAP KEPUASAN INDUSTRI KECIL DAN SEDERHANA SEKTOR  
PEMBUATAN MELALUI KESAN PEMANFAATAN E-DAGANG DI  
MALAYSIA**

**ABSTRAK**

Walaupun Malaysia sebuah negara yang sedang rancak membangun di Asia Tenggara, kepustakaan menunjukkan bahawa kadar kegagalan Industri Kecil dan Sederhana (IKS) dalam sektor pembuatan memang tidak dapat dielakkan. Kajian menunjukkan bahawa orientasi keusahawanan dan orientasi pasaran adalah penting untuk mengekalkan kelangsungan dan kepuasan dalam perniagaan dari sudut prestasi kewangan dan bukan kewangan. Tambahan pula, kajian ini membuat hipotesis bahawa pemanfaatan e-dagang (komunikasi masuk, komunikasi keluar, dan pengambilan pesanan) mampu meningkatkan lagi kesan orientasi keusahawanan dan orientasi pasaran terhadap prestasi perniagaan. Populasi kajian ini ialah IKS dalam sektor pembuatan. Berdasarkan data yang diperolehi daripada 107 IKS dalam sektor pembuatan di Malaysia, dapatan kajian menunjukkan bahawa orientasi keusahawanan tidak mempunyai kesan ke atas prestasi kewangan, tetapi ia mempunyai kesan positif ke atas prestasi bukan kewangan. Sebaliknya, orientasi pasaran mempengaruhi prestasi kewangan dan bukan kewangan secara positif. Tambahan lagi, kajian ini membuktikan bahawa pemanfaatan e-dagang iaitu pengambilan pesanan, komunikasi masuk, dan komunikasi keluar tidak memberi kesan terhadap hubungan antara orientasi keusahawanan dan orientasi pasaran dengan prestasi perniagaan (prestasi kewangan dan bukan kewangan). Walau bagaimanapun, untuk mendapatkan pemahaman terhadap dapatan kajian ini, sebanyak lima temu bual telah dilakukan dengan pemilik-pengurus

IKS pembuatan di Pulau Pinang. Temu bual ini telah memberi pemahaman dan penjelasan yang mendalam tentang dapatan tersebut. Dapatan dan temu bual ini telah memberi implikasi dan panduan praktikal kepada Kerajaan Malaysia, pemilik-pengurus IKS pembuatan, dan penyelidik serta pembangun teknologi maklumat. Untuk mengekalkan kelangsungan dan kepuasan perniagaan, IKS seharusnya memperkuat orientasi strateginya dengan aktiviti-aktiviti berorientasikan keusahawanan dan pasaran. Namun, situasi pasaran masih kurang hasilnya antara prestasi orientasi keusahawanan dan perniagaan kewangan yang mungkin disebabkan oleh situasi pasaran: tepu atau tidak tepu. Ramai pemilik-pengurus, berdasarkan maklumat demografi, memiliki pengetahuan teknologi tetapi tidak begitu mendalam. Berdasarkan pandangan berasaskan sumber dan teori kemampuan dinamik, e-dagang bukan sekadar perihal kewujudan laman web tetapi juga tentang perihal mengambil maklumat bernilai daripadanya untuk memberi panduan kepada aktiviti-aktiviti orientasi keusahawanan dan pasaran dalam memacu prestasi perniagaan. Oleh itu, dalam era teknologi ini, usahawan harus melengkapkan diri mereka dengan pengetahuan teknologi maklumat yang mencakupi bagi membolehkan mereka mengetahui cara memanfaatkan teknologi tersebut. Teknologi maklumat telah menjadi satu alat yang semakin tersebar berbanding beberapa dekad dahulu. Justeru itu, pemahaman mendalam terhadap manfaat yang ditawarkan oleh e-dagang dapat membantu sesebuah syarikat untuk dilihat berbeza daripada pesaing yang lain. Pada akhir kajian ini dinyatakan batasan dan saranan kajian yang dapat dilakukan pada masa hadapan.



**THE IMPACT OF ENTREPRENEURIAL ORIENTATION AND MARKET  
ORIENTATION ON MANUFACTURING SMALL AND MEDIUM  
ENTERPRISES SATISFACTION WITH THE MODERATING EFFECT OF  
E-COMMERCE UTILIZATION IN MALAYSIA**

**ABSTRACT**

Although Malaysia is a fast developing country in Southeast Asia, the literature revealed that the failure rate of Small and Medium Enterprises (SMEs) in the manufacturing sector is inevitable. This study proposes that entrepreneurial orientation and market orientation are essential to maintain business survival and satisfaction in terms of financial and non-financial performance. In addition, the study hypothesizes that e-commerce utilization (i.e., inbound communication, outbound communication, and order-taking) could further strengthen the effects of entrepreneurial and market orientations on business performance. The population of this study is SMEs in the manufacturing sector. Based on data collected from 107 responses, the results show that entrepreneurial orientation has no impact on financial performance, while it has a positive impact on non-financial performance. In contrast, market orientation affects financial and non-financial performance positively. In addition, the study shows that e-commerce utilization, i.e. order-taking, inbound, and outbound communications have no moderating effect on the relationships between entrepreneurial orientation and market orientation and business performance (financial and non-financial business performance). However, in order to get more insight on the results of this study, five interviews were conducted with owner-managers of manufacturing SMEs in Penang. The interviews have given a deeper insight and explanation to the results. Based on the results and the interviews, practical implication and guidelines are provided to the

Malaysian government, owner-managers of manufacturing SMEs, and IT researchers and developers. To maintain business survival and satisfaction, SMEs should enrich their strategic orientations with entrepreneurial and market oriented activities. Yet, the market situation should be considered as the lack of effect between EO and financial business performance could be due to the market situation: saturated or unsaturated. Many owner-managers based on the demographic information have technology knowledge, albeit not deep. This could explain why e-commerce utilization has shown no impact on the relations between entrepreneurial and market orientations and business performance. Based on resource-based view and the theory of dynamic capabilities, e-commerce is not merely a matter of web presence, but rather it is a matter of taking the valuable information it offers to guide the entrepreneurial and market oriented activities to boost business performance. As a result, because we live in a technology-oriented era, entrepreneurs should equip themselves with sufficiently updated IT knowledge in order to utilize technologies beyond superficial implementation. IT has become a widely available and inimitable tool unlike decades ago; thus, understanding the deep benefits of what e-commerce utilization can offer, could help to set a company apart from its competitors. At the end of this research, the limitation and future study suggestions are provided.

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 Introduction**

Small and medium enterprises are playing a pivotal role in a nation's economy; this is why literature has seen attention on studies conducted in this sector (Char Fei Ho, 2013; Char Fei Ho et al., 2013). Besides, SMEs are an essential source of employment and a mechanism to stimulate economic growth (SME Info., 2016). Malaysia considers enhancing SMEs contribution to gross domestic products (GDP) of the nation as a main factor to become an advanced nation; therefore, it is one of the objective of Malaysia plan 2020 (SME Corp. Malaysia, 2012d, 2015c).

However, the failure rate of businesses in SME sector is inevitable in Malaysia (SME Corp. Malaysia, 2012e). Although, failure of SMEs is common in many countries, many studies have investigated the effect of various factors on their performance in order to help SMEs to maintain survival. Given the awareness of the essential role of SMEs in the nation's growth and employment, understanding how SMEs could utilize their limited sources is critical. The aim of this study is to investigate the relationships between entrepreneurial and market orientations and business satisfaction in terms of financial and non-financial performance.

As we are living in a technology oriented era, e-commerce adoption among SMEs cannot be ignorable. E-commerce is considered as an essential tool of providing valuable information about customers' preferences and pattern sales. Employing this information could help SMEs to guide their entrepreneurial and marketed oriented activities. In addition to the entrepreneurial and market orientation and business satisfaction relationships investigation, the study examines whether e-commerce

utilization (i.e., inbound communication, outbound communication, and order-taking) plays any moderating effect on these relations.

This chapter provides an overview of the study and background of SMEs in Malaysia. In addition, the chapter covers the importance of SMEs in general and in manufacturing sector in specific; in addition to, the role of information communication technology, especially electronic commerce. This chapter also describes the research problem, research objectives and research questions. Additionally, operational definitions of variables are provided. Finally, the limitation and the significance of the study are described at the end of the chapter.

## **1.2 Overview**

In this section gives an overview of small and medium enterprises (SMEs) and electronic commerce (e-commerce).

### **1.2.1 Small and Medium Enterprises (SMEs)**

Small and medium enterprises (SMEs) are considered as the mainstay of any economy since they contribute towards employment and growth (Madanchian et al., 2015; SME Info., 2010). For instance, most new jobs are created by entrepreneurships since 1993 until the third quarter of 2008, and businesses which have 500 employees or fewer, which are known as SMEs (USITC, 2010), generated 64 percent of all new jobs in the United States of America (Bygrave et al., 2010).

Likewise in Malaysia, SMEs are the main contributor of bolstering the Malaysian economy (Bank Negara Malaysia, 2013b; Mahmud et al., 2014; Said et al., 2011; SME Info., 2010). SMEs contribute up to 97.3 percent of the total establishments in Malaysia (Department of Statistics Malaysia, 2012; The Star, 2014). In 2005, SMEs

contributed to the total the Gross Domestic Product (GDP) of the nation by 32 percent (Bank Negara Malaysia, 2008) with an annual change of 5 percent (Bank Negara Malaysia, 2007) where GDP is the total market value of services and products generated by the capital and workers within the borders of a country during a specific time span, which is generally a year (Bygrave et al., 2010). By 2014, SMEs showed higher contribution to the total GDP of the nation by 35.9 percent with an annual change of 6 percent (Department of Statistics Malaysia, 2015d; SME Corp. Malaysia, 2015a). Furthermore, SMEs play a significant role in both employment and export sectors. They account for 60 percent of total employment and 19 percent for the export sectors (Bank Negara Malaysia, 2013b; SME Info., 2010; The Star, 2014).

Since the early 1970s, the Malaysian government has started paying attention toward the development of SMEs (Khalique, 2011) through a direct involvement on the growth of entrepreneurships (Abdullah et al., 2008). Toward SME development, the government has set a comprehensive approach to increase access to financing and strengthen enabling business infrastructure, for example (Bank Negara Malaysia, 2008). Due to the support of the government in terms of subsidies and loans as capitals to start businesses (SME Corp. Malaysia, 2012c), the number of established businesses has increased (Abdullah et al., 2008; Bank Negara Malaysia, 2013b). In addition, the Malaysian government established the Ministry of Entrepreneurs Development in 1995 to support entrepreneurial development and entrepreneurships. Moreover, in 2004 the government set up the National SME Development Council to coordinate the efforts made by different agencies and ministries toward enhancing SMEs (SME Corp. Malaysia, 2012c). As a result, new enterprises are important in terms of making contributions to economic, social, and technological changes (Volkman et al., 2010).

Malaysia has devised many plans in order to improve and make such a transition of its economy from a developing country to a developed one by year 2020. For example, the Tenth Malaysian Plan and New Economic Model focus on potential SMEs toward maintaining more competitiveness in the business environment (SME Info., 2010). The purpose of the Plan is to move Malaysia towards becoming a high income nation by 2020. In order to do so, Malaysia looks forward to increasing the contributions of SMEs in order to become a developed country by 2020 (SME Corp. Malaysia, 2012d, 2015c). Figure 1.1 shows that Malaysian government anticipates more contribution role of SMEs in 2020 in terms of exports, employment, and GDP. Similarly, The Eleventh Malaysian Plan 2016-2020 which was published in 2015, focuses on developing sustainable SMEs where the SMEs are expected to contribute 41 percent of Global Domestic Product (GDP) by 2020 (Economic Planning Unit, 2015; SME Corp. Malaysia, 2015b).

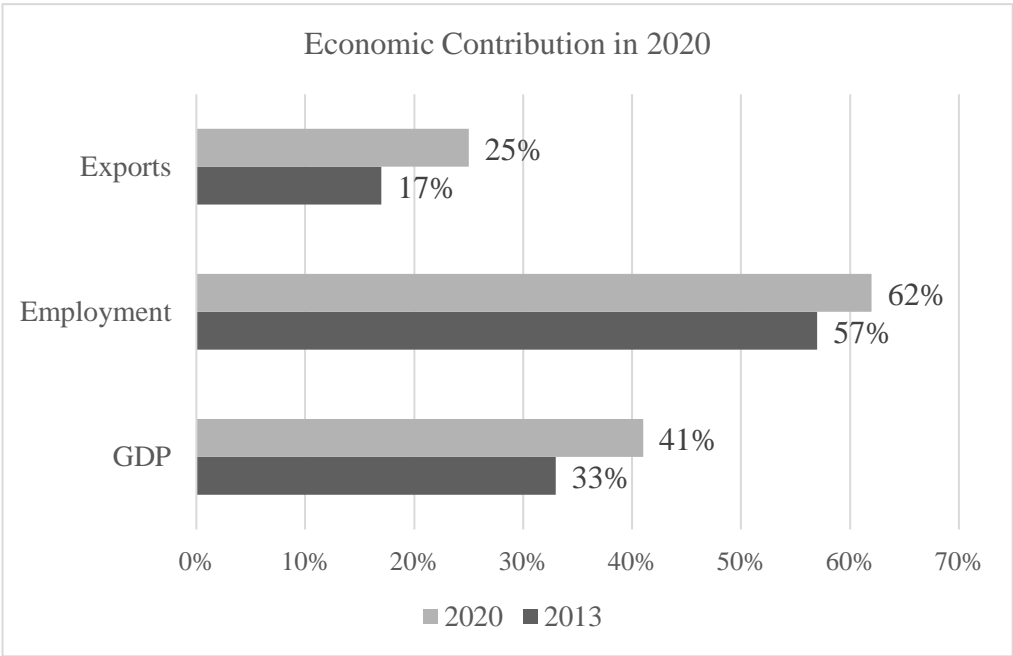


Figure 1.1 Economic Contribution in 2020 (SME Corp. Malaysia, 2015c)

SMEs in Malaysia are defined according to Small and Medium Enterprise Corporation Malaysia (SME Corp. Malaysia). Manufacturing, manufacturing-related services, agro-based industries and services, primary agriculture and information and communication technology (ICT) services are the categories under which SMEs fall. In terms of the size, there are three types of SMEs: micro-enterprises, small enterprises, and medium enterprises. The main criteria that distinguish between the three types of SMEs are sales turnover and the number of full-time employees. Any business that meets one of the two criteria is deemed as an SME. Full-time employees refer to all paid workers who work for at least 6 hours a day and 20 days a month (Department of Statistics Malaysia, 2012). Table 1.1 shows the definition of SMEs based on SME Corporation Malaysia (SME Corp. Malaysia, 2013b).

Table 1.1

*Definition of SMEs Adopted from SME Corp. Malaysia (2013b) and Bank Negara Malaysia (2013a)*

	Micro-enterprise	Small enterprise	Medium enterprise
Manufacturing	Full-time employees of no more than 4 or sales turnover of less than RM300,000	Full-time employees between 5 to 74 or sales turnover between RM300,000 to less than RM15 million	Full-time employees between 75 to 200 or sales turnover between RM15 million to RM50 million
Other sectors including services	Sales turnover of less than RM300,000 OR full time employees less than 5	Sales turnover between RM300,000 and less than RM3 million OR full time employees between 5 to less than 30	Sales turnover between RM3 million to not exceeding RM20 million or full time employees between 30 to not exceeding 75

Service and manufacturing sectors are the main contributors to the Malaysian economy; the manufacturing sector is an important area (MIDA, 2012) and is considered the second largest sector including large as well as small and medium enterprises (MPC, 2013, 2014, 2015b, 2016). Table 1.2 illustrates labor productivity,

gross domestic products (GDP), and the number of employees in the sector of manufacturing. Since 2010, labour productivity, as measured by the real value added by a single worker (Bank Negara Malaysia, 2007), has been increasing every year on the average of about 5 percent. This can be observed in the difference between 2010 and 2015, where it was RM54,392 and RM105,156 in 2010 and 2015 respectively. GDP growth registered 4.74 percent in 2015 compared to 6.2 percent in 2014 (MPC, 2015b, 2016). Besides, the manufacturing sector has been increasingly contributing in term of gross domestic products annually. In terms of employment, the manufacturing sector is the nation's second biggest employer after the service sector accounting for 2.3 million people in 2015 (MPC, 2016).

Table 1.2

*Labor productivity, gross domestic products (GDP) and employment values in manufacturing sector*

	Labor productivity (growth %)	Gross domestic products billion (growth%)	Employment (million)
2010	RM54,392 (9.4%)	RM154.600 (11.4%)	3.4
2011	RM54,509 (2%)	RM178.200 (4.5%)	2.3
2012	RM83,822 (4.5%)	RM186.900 (4.8%)	2.2
2013	RM88,389 (5.4%)	RM193.000 (3.4%)	2.2
2014	RM90,556 (3.8%)	RM205.200 (6.2%)	2.3
2015	RM105,156 (7.1%)	RM244.000 (4.74%)	2.3

Sources: EPU (2013); EPU (2011); MPC (2011); MPC (2012); MPC (2013); MPC (2014); MPC (2015b), MPC (2016)

Based on the economic census, published by the Department of Statistic Malaysia every 5 years, in 2012 (Department of Statistics Malaysia, 2015c), the results revealed that the total number of SMEs in Malaysia is 645,136 which accounts for 97.3



percent of total business establishments (see Table 1.3); in contrast, large establishments represent only 2.7 percent (17,803). However, by applying the new definition of small and medium enterprises, the total number of establishments increased to 98.5 percent further (Bank Negara Malaysia, 2013a). Regarding gross output, SMEs contribute 28.5 percent or about RM 507 million. In addition, SMEs employ over 3.6 million people.

The main sectors of the 645,136 SMEs are services, manufacturing and construction. The largest sector is service sector comprising 580,356 establishments or 90 percent. Besides, SMEs in the service sector accounted for 39.4 percent to the value added in 2014 (Department of Statistics Malaysia, 2015d). The second largest sector is manufacturing where the number of SMEs is 37,861 or 5.9 percent where the value added by its SMEs was about 33.9 percent backed by rubber and plastic products, chemical, petroleum subsectors (Department of Statistics Malaysia, 2015d). The third largest sector is the construction sector accounting for 3.0 percent or 19,283 SMEs.

Table 1.3  
*Key indicators of SMEs (Department of Statistics Malaysia, 2012)*

	Total	Large	SMEs
Number of establishments	662,939	17,803	645,136
Gross output (RM million)	1,777,317	1,270,228	507,089
Employment (persons)	707,489	493,568	213,921
		%	
Number of establishments	100	2.7	97.3
Gross output	100	71.5	28.5
Value added	100	69.8	30.2
Employment	100	47.3	52.7

Visibly, the service sector contribution is higher compared to other sectors, i.e. manufacturing, because in terms of number of SMEs, the service sector represents 90

percent of the total number of SMEs while manufacturing sector represents only 5.7 percent (Department of Statistics Malaysia, 2012). Similarly, in terms of employment, the service sector contributes to 70 percent of the labor force, whereas the contribution from manufacturing is 18.9 percent (Department of Statistics Malaysia, 2012).

Both manufacturing and service sectors are considered the key drivers of the overall economic growth in Malaysia (Bank Negara Malaysia, 2015). In fact, the contribution and participation of the manufacturing sector in Malaysia is vital socially and economically. Although the number of SMEs in the service sector is over 15 times the number of SMEs in the manufacturing sector, the number of employees in the service sector is about only 4 times over the number of employees in the manufacturing sector (Department of Statistics Malaysia, 2012). In other words, taking into consideration the size of service and manufacturing sectors, the contribution of the manufacturing-sector employment is much higher comparing to the contribution of service-sector employment.

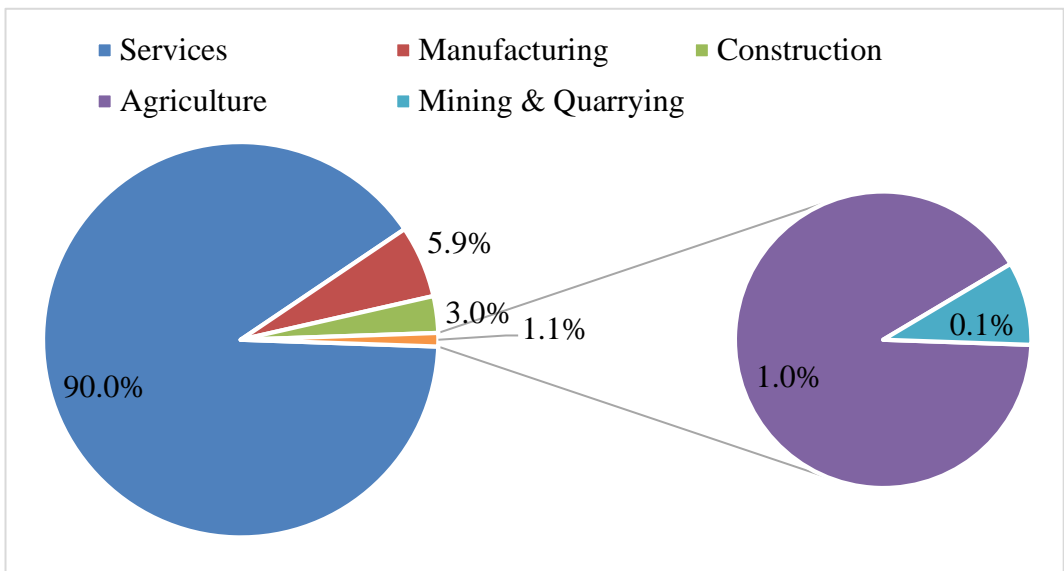
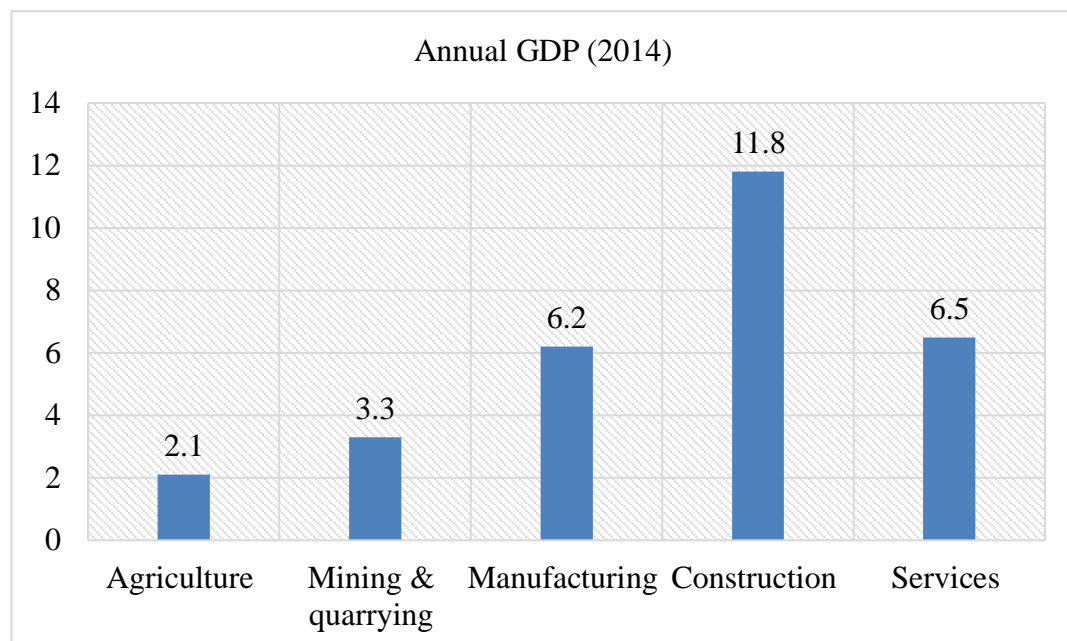


Figure 1.2 Distribution of SMEs by sector (Department of Statistics Malaysia, 2012)

Likewise, the contribution of the manufacturing sector to the total gross output (RM507.1 billion) is significant since service-sector proportion toward gross output is only approximately double of the manufacturing sector's at 56.53 percent (RM286.64 billion) and 38.26 percent (RM194.032 billion) respectively (Department of Statistics Malaysia, 2012; SME Corp. Malaysia, 2015a). Furthermore, the GDP values of manufacturing sector and service sector are almost the same. Based on the annual report 2014/2015 published by SME Corp. Malaysia (2015a), the GDP of the manufacturing sector contributes 6.2 percent, whereas the service sector contributes for 6.5 percent (see Figure 1.3). As a result, in light of each sector size, the comparison between manufacturing's contribution and the service sector's is inevitable. This study focuses on the manufacturing sector as Department of Statistics Malaysia (2012) stated that most business failures were in that sector.

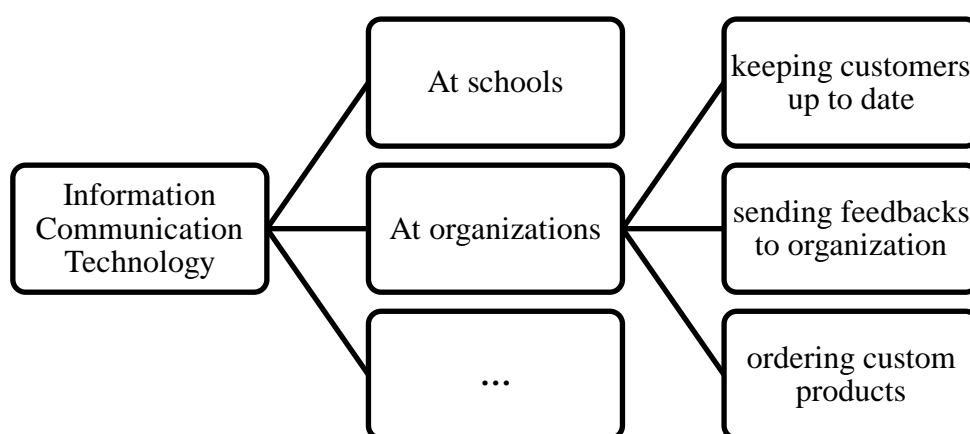


*Figure 1.3 Annual GDP 2014 across sectors (SME Corp. Malaysia, 2015a)*

### **1.2.2 Electronic Commerce (E-Commerce)**

Information communication technology (ICT) has been a part of our life in different aspects. At schools, for instance, online portals are used to help students to enroll in

different courses and classes (Valacich et al., 2010). In business, ICT, e.g. websites and emails, is a way of keeping customers up-to-date on the latest trends, products, services and promotions that might be offered to attract customers toward making purchases (see Figure 1.4). In addition, customers are able to provide feedbacks to organizations through websites and emails to help these organizations to enhance their products and services to meet customers' needs (Ganesh et al., 2010). ICT adoption such as e-mail usage has been evolving gradually in SMEs. In developed countries, small firms including micro-enterprises, which have no more than ten employees and poses no more than limited resources, have recognized the benefits of ICTs through the employment of at least one computer with an Internet connection (Olatokun et al., 2011).



*Figure 1.4* Examples of ICT involvements in our daily lives

Electronic commerce is a gift of ICT evolution where customers are not only able to search for products and services, but also they have the capability to make purchases and online transactions. Moreover, consumers are able to order custom products, such as adding special features to their purchased cars, or even assemble their desired computers based on their own needs and wants (Ganesh et al., 2010). Consequently, using e-commerce facilitates organizations in terms of disclosing

information regarding various products and services to their customers directly so that customers and the said organizations are in direct contact.

The government of Malaysia has encouraged SMEs to adopt ICT because of its importance in increasing productivity as well as efficiency (SME Corp. Malaysia, 2014), strengthening their competitiveness (Bank Negara Malaysia, 2007), and enhancing domestic SME growth (Bank Negara Malaysia, 2008). The government has implemented programs in their effort to encourage SMEs to adopt ICT in their business operations, e-payment, and online commerce applications (SME Corp. Malaysia, 2015a). Besides these programs, the government provides loans to SMEs across all sectors to assist them in adopting information communication technology (Bank Negara Malaysia, 2008; SME Corp. Malaysia, 2015a). In 2015, the government has secured a budget of RM357.3 million to carry out 23 programs to encourage technology adoption as well as innovation among 7,000 SMEs (SME Corp. Malaysia, 2015a).

Because of the advent of electronic commerce as an ICT solution of marketing and online transactions, the world has become as a village electronically. Businesses are no longer promoting products and services only to the local people, but also to international consumers. Geographical boundaries are not considered a barrier when promoting products and service. In other words, any person around the world can surf various websites seeking his or her needs and wants irrespective of the location of the sellers.

Department of Statistics Malaysia (2015a) refers e-commerce as e-commerce transactions and defines it as the sales or purchases of services or goods carried out through the Internet or computer networks specially designed for placing or receiving

of orders. E-commerce transactions could be conducted between different parties: individuals, enterprises, households, governments and other public or private organizations (Department of Statistics Malaysia, 2015a). However, e-commerce is not limited only to marketing and transaction, but it broadly covers sharing information, selling and buying goods, providing customer services, working with business partners, increasing productivity within firms (Ahmad et al., 2015; Napier, 2006). In this study, e-commerce is not limited to e-commerce transactions; it also covers e-commerce utilization in reference to Internet usage to connect to customers and suppliers in favor of information exchange in addition to online transactions.

Malaysia is regarded as one of the developing countries that have started to take advantage of e-commerce in both international as well as domestic firms (Ahmad et al., 2015). In addition, the government puts an effort to boost e-commerce development in Malaysia (The Star, 2015a). In Malaysia, the total value added of e-commerce increased from RM55.2 billion to RM63.8 billion in 2013 and 2014 respectively, where the increase is over than RM8.5 billion. In terms of growth, e-commerce reached 15.7 percent compared to 10.8 percent in 2013. Non-ICT industry was the main contributors to e-commerce with a share of 79.5 percent (Department of Statistics Malaysia, 2015b). Figure 1.5 illustrates the values added of e-commerce annually from 2010 to 2014 with percentage change. However, despite the government's effort, e-commerce utilization among SMEs is still low (Ahmad et al., 2015; The Star, 2012).

### **1.3 Background of the Study**

Despite the best efforts of venture founders to keep their business survived, many new businesses do not maintain their businesses in operation as the majority face mortality

in their early inception while others might last from months to years before they are closed permanently (Nucci, 1999; Yang et al., 2012). Many studies in literature (Abdullah et al., 2009; Cassar, 2006; Christie et al., 2012; Jones et al., 2014; Lasch et al., 2005, 2007; Reiss, 2006; Song, Benedetto, et al., 2010; Song, Song, et al., 2010; Song et al., 2008; Yang et al., 2012) have shown that the rate of survival and success for new businesses is low in different countries, i.e. the United States of America, France, China as well as Malaysia.

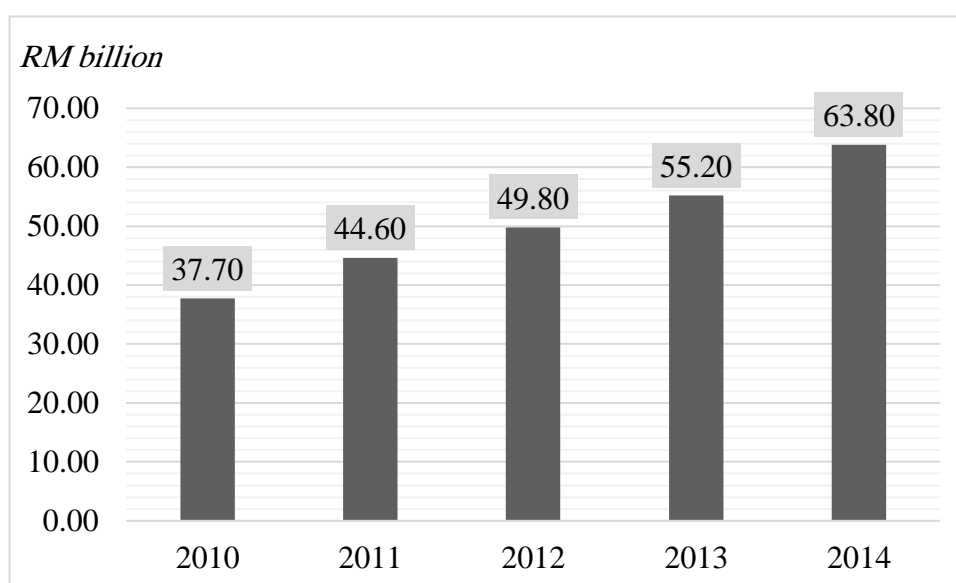


Figure 1.5 Value added of e-commerce - annual percentage change (Department of Statistics Malaysia, 2015b)

Numerous studies have investigated the effects of various factors associated with business success and failure. As survival is the contrary status of failure (Chrisman et al., 1998) and survival is a constitutive indicator of success (Korunka et al., 2010), examining the factors which contribute to business success is useful to determine the factors of business failure because the deficiency of success factors will lead to failure business. Therefore, business success and business failure studies contribute toward the same objective. This objective is to determine the factors which cause business failure toward avoiding them in order to maintain survival.

Many factors' contribution has been proposed and investigated on business performance. Some of the examined variables included but not limited to are internationalization (Hsu et al., 2013), personal characteristics (Korunka et al., 2010), network reliance (Sullivan et al., 2011), university partnership (Zahra et al., 2000), and supply chain agility (Yusuf et al., 2014). There is no unanimity among researchers on successful factors (Unger et al., 2011). Besides the lack of consensus, the empirical results of various studies are inconsistent and fragmented (Song et al., 2008). In other words, different studies have shown either positive, negative, or zero correlation between such a factor and firm performance. This study intends to study the effect of market and entrepreneurial orientations on business satisfaction.

The effect of market orientation (MO) and entrepreneurial orientation (EO) on SMEs success have been documented as important factors for many reasons. First, strategic orientations are considered as principles that influence a firm's activities and generate the behaviours that could result in boosting business satisfaction (Hakala, 2011). Second, many studies have confirmed these orientations to have a positive impact on business performance toward avoiding failure and maintaining success (Lee et al., 2015; Li et al., 2008; Lim et al., 2013; Urde et al., 2013). Third, EO and MO variables are essential variables in the study of organizational performance (Lim et al., 2013; Urde et al., 2013), especially for SMEs; as they have fewer resources compared to large enterprises, better utilization of their internal resources becomes an urgent need (Brouthers et al., 2015; Wiklund et al., 2003). Therefore, understanding strategic orientations in SMEs is essential as strategic orientations show how SMEs exploit their resources in order to achieve survival (Altinay et al., 2015).

Finally, in revising literature concerning business failure as well as business success, many studies have highlighted that a shortage in innovativeness and market



knowledge are essential contributors toward business failure (e.g., Covin et al., 1991; Hamrouni et al., 2012; Pei et al., 2010; Rauch et al., 2011). Innovation is an important aspect to compete in the market against bigger incumbents (Rosenbusch et al., 2011). Similarly, market orientation presents great importance to brand image as well as customers (Urde et al., 2013). The needs and wants of customers are considered point of departure for Amazon. According to Amazon's principles, "Customer Obsession: Leaders start with the customer and work backwards. ... Although leaders pay attention to competitors, they obsess over customers." (Amazon, 2016). Thus, customers' preferences are paramount to businesses from which customers are the point to start. However, entrepreneurial and market orientations are not the only essential aspects to business; there are many factors proposed by literature to help SMEs survive and maintain success. This research only studies the impact of EO and MO and business satisfaction.

Moreover, National SME Development Council has released a document titled "Summary SME Masterplan 2012-2020". The Masterplan has determined six factors that could help Malaysian SMEs to boost their performance. Innovation adoption, research and development (R&D) activities, a focus on marketing and branding, and technology adoption are some of the main factors that could boost SMEs performance in Malaysia (SME Corp. Malaysia, 2012b). In addition, the government has even stressed that in order to move Malaysia to the status of a high-income country, SMEs should be dynamic, creative, as well as innovative (MPC, 2015a). Based on the eleventh Malaysian Plan 2016-2020, "Innovation is a key driver for economic growth... In addition, innovation can create additional sources of revenue through differentiated products and services that serve unmet customer needs." (EPU, 2015, pp. 1-15). Likewise, entrepreneurship is an important concept in Malaysia to help to

reduce the failure rate of start-up businesses. In view of that, the Malaysian government has launched 1Malaysia Entrepreneur in 2013 to help entrepreneurs embark and maintain their own businesses by leveraging public and private sector resources (1MET, 2013). 1MET offers a series of intense knowledge on the basics of entrepreneurship through boot-camps designed to sensitize nascent and first-time entrepreneurs (1MET, 2013).

Although many studies have revealed that entrepreneurial and market orientations have positive reflection on business satisfaction, there are studies which have found null or negative impact relations. Therefore, the empirical results of entrepreneurial orientation and market orientation are inconsistent and mixed (Wang et al., 2012). However, in either case, the study proposes that entrepreneurs could utilize e-commerce, so that EO and MO could show a stronger positive impact on business satisfaction. In other words, the study proposes that e-commerce utilization as a moderating variable is going to strengthen the relations between EO and MO and business satisfaction (Hayes, 2013). However, studying the direct effect of e-commerce utilization on business satisfaction is beyond the scope of this study. To the best of the researcher's knowledge, no previous study has examined the role of e-commerce utilization as a moderating factor on the relationships between entrepreneurial orientation and market orientation and firm performance.

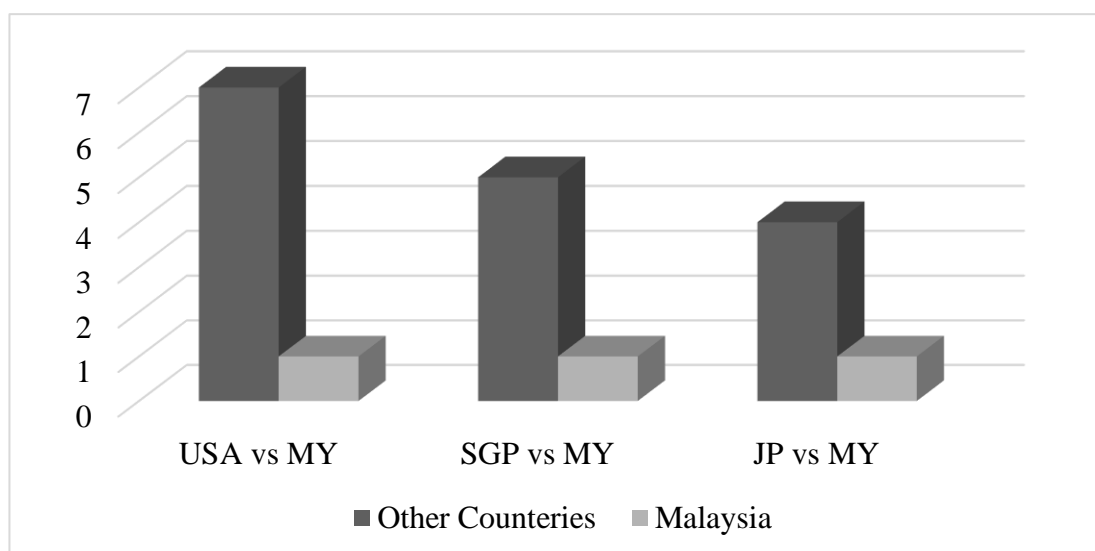
## **1.4 Research Problem**

### **1.4.1 Lack of Survival and Competitiveness**

Although Malaysia is a fast developing country in South-East Asia (Sambasivan et al., 2009), the failure rate of SMEs in Malaysia is inevitable. Although, there is no reliable figure, the expected failure rate of SMEs is high at about 60 percent (Ahmad et al.,

2009; Khalique, 2011; Khalique et al., 2011; MDTCA, 2006; Rosnan et al., 2016). According to SME Corp. Malaysia (2012e), about 42 percent of manufacturing firms which had existed in 2000, ceased operations in 2005. It denotes that many of SMEs in Malaysia are not able to stay in market with competitive enterprises (Khalique et al., 2011).

Besides, in terms of comparison with international SMEs performance, Malaysian SMEs are not in a good position among their counterparts in high income countries (see Figure 1.6). SMEs Masterplan 2012-2020 published by the National SME Corporation Malaysia indicated that SMEs in Malaysia are seven times less productive than SMEs in the United States of America. Moreover, SMEs in Singapore and Japan are five and four times more productive than Malaysian SMEs respectively. In other words, Malaysian SMEs are not competitive when compared to the SMEs in high income countries' (SME Corp. Malaysia, 2012e).



*Figure 1.6 Comparing Malaysian SMEs with International Counterparts in Productivity (SME Corp. Malaysia, 2012e)*

#### **1.4.2 Lack of E-Commerce Utilization**

The Masterplan 2012-2020 (SME Corp. Malaysia, 2012b) has identified six factors that could boost the Malaysian SME's performance. Based on the analysis conducted by SME Corp., one of the most important factors is technology adoption. The level of technology adoption in Malaysia is far below those of the high-income countries. Although the government has put in effort to facilitate technology, SMEs lack participation in this area. In addition, technology adoption has always been considered a cost rather an investment; therefore, technology adoption is poor among SMEs.

E-commerce is an example of technology adoption. In Malaysia, many SMEs have not recognized the usefulness of e-commerce (Ainin et al., 2003; Kurnia et al., 2015; Patrick, 2010; Salwani et al., 2009; Shah Alam et al., 2011; Shah Alam et al., 2009; Tan et al., 2009) and they are still ignorant of technology adoption (Dahnil et al., 2014; Ramayah et al., 2016). Moreover, literature has revealed that most technology adoption studies have been carried out on developed countries rather than on developing countries such as Malaysia (Ahmad et al., 2015; Kurnia et al., 2015; Saffu et al., 2012; Sarosa et al., 2005). Besides, most e-commerce studies have been conducted on large enterprises rather than SMEs (Chowdhury, 2011; Shah Alam, 2009). Although SMEs have poor resources, they cannot be oblivious to the adoption of technology in their daily operations (Ramayah et al., 2009; SME Corp. Malaysia, 2015b) as that may be a key determinant of these enterprises' survival (Lip-Sam et al.; MITI, 2006). SMEs can change the way of conducting their businesses through the Internet to the advantage of their growth strategy (Levy et al., 2003; Ramayah et al., 2016). As a result, web adoption is still a critical area of investigation in SMEs (Ghobakhloo et al., 2011; Solaymani et al., 2012).

Based on the above consideration, the study proposes that EO and MO could maintain business performance satisfaction positively. Furthermore, the study hypothesizes that e-commerce utilization could further enhance the effects of EO and MO and business satisfaction. Otherwise, Malaysia might face detrimental social and economic consequences which could affect its industrial development (Abdullah et al., 2009).

### **1.5 Research Objectives**

The aim of this research is to study the impact of entrepreneurial orientation and market orientation on SME satisfaction in terms of financial and non-financial performance in Malaysia with the moderating application of e-commerce utilization. More specifically, this research will address the following major objectives:

1. To identify the level of performance satisfaction of SMEs in Malaysia.
2. To investigate the relationships between entrepreneurial and market orientations and the level of performance satisfaction of SMEs in Malaysia.
3. To investigate the moderating effect of e-commerce utilization (i.e., inbound communication, outbound communication, and order-taking) on the relationships between entrepreneurial and market orientations and the level of performance satisfaction of SMEs in Malaysia.

### **1.6 Research Questions**

1. What is the level of performance satisfaction of SMEs in Malaysia?
2. Do entrepreneurial and market orientations have positive impacts on the level of performance satisfaction of SMEs in Malaysia?

3. Does e-commerce utilization (i.e., inbound communication, outbound communication, and order-taking) moderate the relationships between the entrepreneurial and market orientations and the level of performance satisfaction of SMEs in Malaysia?

### **1.7 Significance of the Study**

First, most of the research conducted considers large enterprises while ignoring small and medium enterprises (SMEs) and new ventures (Leitch et al., 2010; Zahra et al., 2006). This research fills the gap by focusing on SMEs in a less developed country, i.e. Malaysia. Filling this gap in literature is an urgent need since SMEs are the backbone of any nation. Moreover, the research offers an empirical contribution as it is in the context of Malaysian SMEs. SMEs have a less hierarchical structure and a shorter string of commands compared to large enterprises as hierarchical levels are considered as an obstruction that affect the viability of EO efforts (De Clercq et al., 2013; Gupta et al., 2015).

This study has chosen to examine the effect of strategic orientations, i.e. EO and MO, on business satisfaction. As survival is low among small businesses (Rosnan et al., 2016), developing influential business strategies is crucial for businesses to stay in operation (Lechner et al., 2014; Thornhill et al., 2003). This study proposes that the higher the level of EO and MO practices in businesses, the higher the level of business satisfaction in terms of financial and non-financial performance. Although many studies have conducted the investigation of the impact of EO and MO on firm performance relationships, most of these researches were conducted in advanced countries and large enterprises (Mahmoud, 2011; Polo Peña et al., 2011; Zainol &

Ayadurai, 2011). Thus, this research could enrich the literature with empirical results of strategic orientations conducted on SMEs in Malaysia.

In the same vein, literature has shown high agreement on the positive relationships between EO and MO and business performance (Anderson et al., 2013); however, there are studies which have revealed null or negative relations among the same factors. For both cases, investigating the effect of moderating variable is acceptable since the role of a moderating variable is to strengthen or to change direction of a relation between two factors while changing the level of the moderator (Dawson, 2014). In other words, this study predicts that by utilizing e-commerce in businesses, the relations between EO and MO and business performance are going to be amplified.

As a theoretical significance, the study has proposed to offer empirical results in the literature of the combined effects of the strategic orientations, i.e. entrepreneurial and market orientations, on business performance in terms of financial and non-financial performance. In addition, the study has tried to emphasize that technology adoption, i.e. e-commerce utilization, could enhance and strengthen the relationships between entrepreneurial and market orientations and business performance. In other words, e-commerce is a dynamic capability which could be fused to reconfigure entrepreneurial and market oriented resources to gain a stronger sustainable competitive advantage which, in return, could boost the performance of business performance ahead.

A limited number of studies look at the complementary and the combined and simultaneous effects of strategic orientations such as EO and MO (Altinay et al., 2015; Boso et al., 2013). In addition, considering a sole strategic orientation provides an

incomplete understanding of SMEs' performance (Altinay et al., 2015; Wiklund et al., 2005). However, strategic orientations of SMEs determine the way the SMEs utilize their resources toward enhancing their performance (Altinay et al., 2015). This is considered important especially if taking into account that SMEs have fewer resources in comparison to large enterprises, so better utilization of their internal resources becomes an urgent need (Brouthers et al., 2015; Wiklund et al., 2003).

In IT adoption literature, there are two types of studies: (i) determinants of IT adoption and (ii) the effect of IT adoption on business performance (Voola et al., 2012). Investigating the determinants of IT adoption studies is more dominant and substantial in comparison to the second type (Abebe, 2014), and so is the Malaysian literature. The Malaysian literature seems to have one type of studies which investigates the factors affecting IT adoption among SMEs (e.g., Eei et al., 2012; Kurnia et al., 2015; Lip-Sam et al., 2011a; Selamat et al., 2011; Shah Alam et al., 2011; Yeng et al., 2015) as very few studies have investigated the impact of IT adoption on business performance in general and SMEs in specific (Salwani et al., 2009). This study is different in the sense that it investigates the impact of e-commerce as a moderator toward enhance the relationships between EO and MO and business performance. Besides, the study could be considered as the first one to heed an attention toward the idea that e-commerce utilization could be a resource that could be utilized to provide a valuable information to help to form with EO and MO a sustainable competitive advantage toward enhance business performance based on resource-based view and the theory of dynamic capabilities.

In terms of a practical perspective, the study could offer insight into entrepreneurs in that entrepreneurial and market oriented practices are essential to set their businesses apart from their counterparts, to stay competitive, to maintain survival,



and to boost their business performance in terms of financial and non-financial business satisfaction. Besides, this could help to decrease the failure rate among SMEs and in return increase their contribution toward Malaysian GDP's nation to become an advanced nation in year 2020. In addition, this study could offer an insight into e-commerce utilization in general and in Malaysia in specific. E-commerce utilization could keep businesses in touch with customers and suppliers and offer their businesses valuable information about customers and market trends to get a better guidance to their entrepreneurial and market oriented practices which could maintain satisfaction and survival. As we are in a technology-oriented era, combining technology practices with traditional entrepreneurs' practices (i.e., EO and MO activities) should be a need to technopreneurs.

### **1.8 Scope of the Study**

The scope of this research is confined to the context of small and medium enterprises (SMEs) of the manufacturing sector of Malaysia. Cross-sectional empirical examination is utilized to examine the relationships between entrepreneurial orientation and market orientation and business satisfaction in terms of financial and non-financial performance. In addition, this research examines the role of e-commerce utilization (i.e., inbound communication, outbound communication, and order-taking) as a moderating variable on the relations between entrepreneurial and market orientations and business performance satisfaction.

This study intends to collect data from SMEs in the manufacturing sector in Malaysia. Respondents should fulfil three conditions: (i) the number of full-time employees must not exceed 200 based on the definition of SMEs provided by SME Corp. Malaysia (2013b) (ii) respondents must be owner-managers or active managers

such as managers and general managers, and (iii) SMEs must be operating in the manufacturing sector. Additionally, the study has collected data from West Malaysia where east Malaysia could be considered as a constraint.

Although this study offers a theoretical framework and empirical support of complex relationships among entrepreneurial orientation and market orientation and SME satisfaction with the moderating factor of e-commerce utilization, the study has limitations. As this study is only concerned about SMEs in the manufacturing sector, the results cannot be generalized on SMEs in the other sectors such as service, agricultural, and mining. Consequently, it should be noted that all the inferences and conclusions drawn from this research are meant for only Malaysian manufacturing SMEs of west Malaysia. In other words, east Malaysian states, i.e. and the Federal territory of Labuan, Sabah and Sarawak are not considered in this study.

## **1.9 Definition of Variables**

For the purpose of this study, this section provides the operational definitions of Malaysian SMEs and resource-based factors, i.e. entrepreneurial orientation: pro-activeness, innovativeness, and risk-taking, and market orientation: customer orientation, competitor orientation and inter-functional coordination, e-commerce utilization: inbound and outbound communications and order-taking and SME satisfaction.

### **1.9.1 SME Satisfaction**

SME satisfaction refers to the level of indication in both financial measurements viz. sales turnover, market share, profitability, return-on-investment and sales growth, as well as non-financial performance, i.e. customer satisfaction, customer retention,